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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,587	09/30/2003	Paul J. Bobrowski	PHMC0745-021	5390
26948	7590	03/21/2006	EXAMINER	
ELLIS & VENABLE, PC 101 NORTH FIRST AVE. SUITE 1875 PHOENIX, AZ 85003			MCCORMICK EWOLDT, SUSAN BETH	
			ART UNIT	PAPER NUMBER
			1655	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/674,587	Applicant(s) BOBROWSKI, PAUL J.	
	Examiner S. B. McCormick-Ewoldt	Art Unit 1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-2, 4-29 is/are pending in the application.
- 4a) Of the above claim(s) 11-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-10 and 20-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

The communication of February 13, 2006 is hereby acknowledged.

Applicant elected Group I **without** traverse in the reply filed on March 10, 2005. Claims 11-19 have been withdrawn from further consideration.

#### **Claims Pending**

Claims 1-2, 4-29 are pending. Claims 1-2, 4-10 and 20-29 will be examined.

#### **Claim Objections**

Claims 1, 20 and 28 objected to because of the following informalities: the term "Euphorbaciae" and "Euphorbacea" appear to be misspelled. Applicant could mean --Euphorbaceae-- . Appropriate correction is required.

#### **Claim Rejections - 35 USC § 112**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-2, 4-10 and 20-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

#### **Written Description**

The claims are drawn to the genus *Croton* and methods of extracting the claimed *Croton* plant. In analyzing whether the written description requirement is met for genus claims, it is determined whether a representative number have been described. In this case, the one disclosed embodiment is not representative of the enormous number of plants claimed. The genus *Croton* contains several hundreds of different plant species. The specification provides plants of the

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genus *Croton*. Therefore, Applicant is not in possession of the claimed plant at the time this application was filed and lacks an adequate written description.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 5 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "the proanthocyanidin" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Because claim 9 depend either directly or indirectly upon claims 1 and 5, these claims are also indefinite.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-10 and 20-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ubillas *et al.* ("SP-303, an Antiviral Oligomeric Proanthocyanidin from the Latex of *Croton lechleri* (Sangre de Drago," Phytomedicine Vol.1/1994, pp. 77-106) in view of Hecker *et al.* (US 4,716,179) in view of Winter *et al.* (US 5,474,782).

Ubillas *et al.* ("SP-303, an Antiviral Oligomeric Proanthocyanidin from the Latex of *Croton lechleri* (Sangre de Drago,") disclose extracting latex from *Croton lechleri* by adding isopropanol to the latex, which resulted in a biphasic mixture. The solution was evaporated to dryness and precipitated with ethyl acetate. Ubillas *et al.* did UV absorption on the solution to show homogeneity. (See page 81, columns 1-2; page 82, column 1).

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Ubillas *et al.* did not disclose wherein the layers were specifically hydrophilic and lipophilic or wherein the drying agent was magnesium sulfate or wherein reducing the proanthocyanidin to about 90% relative to the parent latex.

Hecker *et al.* (US 4,716,179) disclose that magnesium sulfate is used as a drying agent (column 5, lines 27-28).

Cragoe *et al.* (US 4,061,643) disclose that magnesium sulfate is used as a drying agent (column 14, line 68).

One of ordinary skill in the art would have been motivated to separate the layers to obtain the desired solution and then evaporate the organic solvent to obtain a purer form of the solution. Although Ubillas does not disclose reducing the proanthocyanidin content to about 90% to the parent latex, one would keep extracting the solution until the required solution is obtained. It was clear from Ubillas that when extracting the latex that the mixture was naturally separated into layers (i.e. biphasic). It was further clear from Hecker that magnesium sulfate is used as drying agent. It was further clear from Cragoe that sodium sulfate is used as a drying agent. Therefore, one of ordinary skill in the art would have had a reasonable expectation that extracting the latex with an organic solvent, one would be able to obtain separate layers and then evaporate off the organic solvent to obtain the desired layer.

#### Summary

No claim is allowed.

#### Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Susan B. McCormick-Ewoldt whose telephone number is (571) 272-0981. The Examiner can normally be reached Monday through Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiners' supervisor, Terry McKelvey, can be reached at (571) 272-0775. The official fax number for the group is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sbme

**PATRICIA LEITH**  
**PRIMARY EXAMINER**  
